GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO:3485
ANSWERED ON:23.03.2017
Sustainable use of Water
Mahendran Shri C.

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

(a) the current status of water resources in comparison to normal year reservoir storages and groundwater levels;

(b) whether there are growing concerns about the sustainable use of ground/surface water with respect to emerging issues of inequity of water distribution and access in the country and if so, the details thereof;

(c) whether the rural areas are struggling with quality of water and if so, the details thereof; and

(d) the steps taken/to be taken by the Government in this direction?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

(DR. SANJEEV KUMAR BALYAN)

(a) Central Water Commission (CWC) monitors live storage status of 91 reservoirs of the country on weekly basis and issues weekly bulletins. The total live storage capacity of these 91 reservoirs is 157.799 BCM which is about 62% of the live storage capacity of 253.388 BCM. As per reservoir storage bulletin dated 16.03.2017, live storage available in these reservoirs is 58.03 BCM, which is 37% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 47.54 BCM and the average of last 10 years live storage was 57.8 BCM. Thus, the live storage available in 91 reservoirs as per 16.03.2017 Bulletin is 122% of the live storage of corresponding period of last year and 100% of storage of average of last ten years.

As per the ground-water-level data, monitored by Central Ground Water Board (CGWB) under this Ministry, Pre-monsoon (April/ May, 2016) water level data when compared with the decadal average (2006-2015) indicate that 66% of the wells have registered decline in ground water level in all the States/UTs of the country.

(b) Yes, Madam. River basin being the natural hydrological unit, total water resources availability is assessed river basin wise. The average annual per capita water availability in the years 2001 and 2011 was assessed as 1820 cubic meters and 1545 cubic meters respectively which may reduce further to 1341 and 1140 in the years 2025 and 2050 respectively. In view of growing population, the per capita water availability in India is reducing progressively.

Annual per-capita water availability of less than 1700 cubic meters is considered as water stressed condition, whereas annual per-capita water availability below 1000 cubic meters is considered as a water scarcity condition. Due to temporal and spatial variability of rainfall, many regions / states receive less than average rainfall and may be considered as water stressed or water scarce.

As per the latest assessment of dynamic ground water resources of India (as on 31st March 2013) carried out jointly by Central Ground Water Board and State Ground Water Departments, the total annual replenishable ground water resources of the have been estimated as 447 billion cubic meter (BCM). Keeping 36 BCM for natural discharge, the net annual ground water availability for entire country is 411 BCM. The state-wise ground water resources availability, utilization and stage of development India (As on 31st March 2013) are given in Annexure I.

(c) The surveys and the ground water quality studies carried out by CGWB and State Departments have shown that ground water in major parts of the country is potable. However, sporadic occurrence of contaminants like Arsenic, Fluoride, Nitrate etc. in ground water above the permissible limits prescribed by Bureau of Indian Standards (BIS) have been reported in some parts of the country including the rural areas. The names of the districts state wise which are partly affected by different contaminants in ground water are given in Annexure II.

(d) Water being state subject, measures for water conservation and management are taken by respective state Governments depending on their priority and resources. In order to supplement the efforts of state governments, Central Government provides technical and financial assistance through various schemes and programmes.

Some of such interventions are as follows:

â€¢ CGWB monitors ground water quality of shallow aquifers on a regional scale, once every year during pre-monsoon (April/May). Ground water quality data generated during various scientific studies and ground water quality monitoring is utilized to identify the extent of ground water contamination in different parts of the country. CGWB carries out exploratory drilling to delineate contaminant

free aquifer zones and successful exploratory wells are handed over to the concerned State agencies for purposeful utilization. Since in-situ treatment of contaminated aquifers due to presence of Arsenic, Fluoride, and Nitrate is difficult, remedial measures are concentrated on providing alternate sources of water supply.
â€¢
The CGWB under the Ministry of Water Resources, RD & GR has carried out Demonstrative Rain Water Harvesting and Artificial Recharge Projects during XI Plan under the Central Sector Scheme of "Ground Water Management & Regulation" in priority areas. The projects aimed at providing technical assistance to State Governments by demonstration of rainwater harvesting & recharge technology for replicating the same in similar hydrogeological environment. During the XI Plan, 133 demonstrative recharge projects were approved for construction of artificial recharge structures in 22 States.
â€¢
A conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" has been prepared by CGWB during the year 2013, which envisages construction of different types of Artificial Recharge and Rainwater Harvesting structures in the Country in an area of 9,41,541 square km by harnessing surplus monsoon runoff to augment ground water resources. The Master Plan has been circulated to all State Governments for implementation.
â€¢
The National Water Policy (2012) has been formulated by Ministry of Water Resources, RD & GR which inter-alia advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through direct use of rainfall. The National Water Policy (2012) has been forwarded to all State Governments/ UTs and concerned Ministries/ Departments of Central Government for appropriate action.

â€¢ Central Government has launched the National Water Mission (NWM) with the objective of conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management. Goals of NWM include "Promotion of citizen and state actions for water conservation, augmentation and preservation" and "Increasing water use efficiency by 20%".

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Annexure I

(Annexure referred to in reply to part (b) of the Lok Sabha Unstarred Question No. 3485 to be answered on 23.03.2017 regarding "Sustainable use of Water")

STATE-WISE GROUND WATER RESOURCES AVAILABILITY, UTILIZATION AND STAGE OF DEVELOPMENT INDIA (As on 31st March 2013)

(in bcm)

Sl. No.	States / Union Territories	Annual Replenishable Ground Water Resource				Natural Discharge during non-monsoon season	Net Annual Ground Water Availability	Annual Ground Water Draft			Projected demand for Domestic and Industrial uses upto 2025	Ground Water Availability for future irrigation use	Stage of Ground Water Development (%)
		Monsoon Season		Non-monsoon Season				Total Irrigation	Domestic and industrial uses	Total			
		Recharge from rainfall	Recharge from other sources	Recharge from rainfall	Recharge from other sources								
1	2	3	4	5	6	7	8	9	10	11	12	13	14 15
	States												
1	Andhra Pradesh	8.97	4.25	3.21	3.97	20.39	1.91	18.48	7.29	0.81	8.10	1.64	10.21 44
2	Arunachal Pradesh	3.340	0.0003	1.092	0.001	4.433	0.443	3.990	0.002	0.007	0.01	0.020	3.967 0.23
3	Assam	20.56	1.82	9.22	0.49	32.11	3.21	28.90	4.06	0.68	4.74	0.84	24.00 16
4	Bihar	20.66	3.36	3.48	3.81	31.31	2.82	28.49	10.36	2.37	12.73	0.60	17.52 45
5	Chhattisgarh	10.11	0.76	0.87	1.06	12.80	0.90	11.90	3.76	0.64	4.40	0.76	7.38 37
6	Delhi	0.09	0.02	0.014	0.22	0.34	0.03	0.31	0.14	0.25	0.39	0.25	0.02 127
7	Goa	0.15	0.011	0.01	0.08	0.24	0.10	0.15	0.02	0.03	0.05	0.04	0.09 37
8	Gujarat	13.93	3.22	0.00	3.71	20.85	1.07	19.79	12.30	1.14	13.44	1.46	6.77 68
9	Haryana	3.62	3.10	1.03	3.60	11.36	1.06	10.30	13.32	0.60	13.92	0.56	-3.58 135
10	Himachal Pradesh	0.40	0.02	0.11	0.03	0.56	0.03	0.53	0.16	0.11	0.27	0.07	0.30 51
11	Jammu & Kashmir	1.22	2.69	0.79	0.55	5.25	0.43	4.82	0.20	0.98	1.18	1.07	3.55 24
12	Jharkhand	5.61	0.73	0.06	0.16	6.56	0.57	5.99	0.63	0.72	1.35	0.17	5.19 23
13	Karnataka	6.74	4.18	2.67	3.40	17.00	2.16	14.83	8.76	0.99	9.76	1.49	5.55 66
14	Kerala	4.51	0.04	0.59	1.13	6.27	0.60	5.66	1.18	1.45	2.63	1.55	2.93 47
15	Madhya Pradesh	28.59	1.27	0.82	5.30	35.98	1.82	34.16	17.95	1.41	19.36	2.35	13.86 57
16	Maharashtra	21.96	1.64	1.83	7.76	33.19	1.71	31.48	15.93	1.14	17.07	2.21	13.72 54
17	Manipur	0.244	0.010	0.201	0.019	0.474	0.047	0.426	0.004	0.001	0.004	0.049	0.374 1.01
18	Meghalaya	3.05	0.00	0.15	0.107	3.31	0.33	2.98	0.0080	0.0040	0.0120	0.207	2.76 0.4
19	Mizoram	0.02899	Negligible	0.01042	Negligible	0.03942	0.00394	0.03548	0	0.00104	0.00104	0.00238	0.0331 2.9
20	Nagaland	1.30	0	0.64	0	1.94	0.194	1.75	0.00	0.03	0.03	0.01	1.74 2.0
21	Odisha	11.29	2.53	1.33	2.63	17.78	1.09	16.69	4.14	0.87	5.02	1.35	11.20 30
22	Punjab	5.75	13.21	1.32	5.64	25.91	2.52	23.39	34.05	0.77	34.81	0.97	-11.63 149
23	Rajasthan	9.06	0.69	0.27	2.49	12.51	1.26	11.26	13.79	1.92	15.71	2.32	0.90 140
24	Sikkim	-	-	-	-	-	-	-	-	-	-	-	- -
25	Tamil Nadu	7.12	9.87	1.52	2.15	20.65	2.07	18.59	12.98	1.38	14.36	1.53	4.08 77
26	Telangana	8.13	2.12	1.65	2.84	14.74	1.35	13.39	7.00	0.76	7.77	1.55	4.83 58
27	Tripura	1.141	0.000	0.738	0.593	2.471	0.202	2.269	0.093	0.072	0.165	0.200	1.976 7.3
28	Uttar Pradesh	41.97	11.52	4.60	18.25	76.34	4.75	71.58	48.35	4.41	52.76	6.44	19.01 74
29	Uttarakhand	1.10	0.22	0.24	0.43	2.00	0.03	1.97	0.84	0.15	0.99	0.30	0.82 50
30	West Bengal	18.71	5.26	1.51	3.85	29.33	2.77	26.56	10.84	1.00	11.84	1.53	14.19 45
	Total States	259.33	72.54	39.98	74.28	446.14	35.49	410.65	228.16	24.71	252.87	31.54	161.76 62

Union Territories
1 Andaman & Nicobar 0.38 0.04 0.0002 0.00005 0.420 0.0420 0.378 0.0001 0.0035 0.0037 0.016 0.361 1
2 Chandigarh 0.015 0.0004 0.005 0.001 0.022 0.0022 0.0194 0 0 0 0 0 0
3 Dadara & Nagar Haveli 0.054 0.002 0.010 0.004 0.070 0.007 0.063 0.008 0.013 0.020 0.014 0.042 32
4 Daman & Diu 0.012 0.001 0.000 0.001 0.015 0.001 0.014 0.008 0.002 0.010 0.003 0.003 70
5 Lakshdweep 0 0 0 0 0.01055 0.00704 0.00350 0.00000 0.00237 0.00237 0 0 68
6 Puducherry 0.095 0.060 0.009 0.028 0.193 0.019 0.174 0.124 0.029 0.153 0.047 0.053 88
Total UTs 0.56 0.10 0.024 0.035 0.73 0.08 0.65 0.139 0.050 0.189 0.08 0.46 29
Grand Total 259.89 72.65 40.01 74.31 446.87 35.56 411.30 228.30 24.76 253.06 31.62 162.22 62

Annexure II

(Annexure referred to in reply to part (c) of the Lok Sabha Unstarred Question No. 3485 to be answered on 23.03.2017 regarding "Sustainable use of Water")

States Wise Details of Affected Districts with Ground Water Contamination by different Chemical Constituents

S.
No. State/ UT Salinity (EC above 3000 micro mhos/ cm)
(EC : Electrical Conductivity) Fluoride
(above 1.5 mg/l) Nitrate
(above 45 mg/l) Arsenic
(above 0.01 mg/l) Iron
(above 1mg/l) Heavy metals:
Lead (above 0.01 mg/l)
Cadmium (above 0.003 mg/l)
Chromium (above 0.05 mg/l)
1 Andhra Pradesh Srikakulam, Visakhapatnam, East-Godavari, West-Godavari Krishna,
Guntur,
Prakasam,
Nellore,
Kadapa,
Kurnool, Ananthapur, Visa khapatnam, West-Godavari Krishna,
Guntur,
Prakasam,
Nellore,
Chittoor
Kadapa,
Kurnool, Ananthapur,
Sirkakulam Srikakulam,
Vizianagaram,
Visa khapatnam, East-Godavari,
West-Godavari Krishna,
Guntur,
Prakasam,
Nellore,
Chittoor
Kadapa,
Kurnool, Ananthapur, Guntur, Kurnool,
Nellore Vishakhapatnam Krishna,
Guntur,
Nellore,
Kurnool,
Chittoor, Cuddapah,
2 Telangana Adilabad, Nizamabad, Karimnagar, Warangal Khammam, Medak, Mehboob Nagar, Nalgonda, Adilabad, Karimnagar, Khammam, Warangal, Mahabubnagar, Medak, Nalgonda, Rangareddy, Nizamabad Adilabad, Nizamabad, Karimnagar, Warangal Khammam, Hyderabad, Mahabubnagar, Medak, Nalgonda, Rangareddy, Nalgonda,

Adilabad, Hyderabad, Karimnagar, Mahabubnagar, Medak, Nalgonda, Nizamabad, Ranga Reddy Lead : Rangareddy, Nalgonda
Cadmium: Rangareddy
Chromium: Rangareddy
3 Assam Goalpara, Kamrup, KarbiAnglong, Naugaon, Golaghat, Karimganj
Sivsagar, Jorhat, Golaghat, Sonitpur, Lakhimpur, Dhemaji, Hailakandi, Karimganj, Cachar, Barpeta, Bongaigaon, Goalpara, Dhubri, Nalbari, Nagaon, Morigaon, Kamrup,Darrang&Baksha Cachar, Darrang, Dhemaji, Dhubri, Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup, KarbiAnglong, Karimganj, Kokrajhar, Lakhimpur, Morigaon, Nagaon, Nalbari, Sibsagar, Sonitpur
4 Arunachal Pradesh Changlang , East Siang, Lohit, Papumpare
5 Bihar Aurangabad, Banka, Bhagalpur, Gaya, Jamui, Kaimur(Bhabua), Munger, Nawada, Rohtas, Jahanabd, Lakhisarai, Sheikhpura, Nalanda Aurangabad, Banka, Bhagalpur, Bhojpur, Darbhanga, Kaimur(Bhabua), Patna, Rohtas, Saran, Siwan Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, Katihar, Khagaria, Kishanganj, Lakhisarai, Munger, Patna, Purnea, Samastipur, Saran, Vaishali
E.Champaran, Gopalganj, Lohardaga, Madhepura,

Muzaffarpur
Saharsa, Siwan, W Champaran Aurangabad, Begusarai, Bhojpur, Buxar, East Champaran, Gopalganj, Katihar, Khagaria, Kishanganj, Lakhiserai, Madhepura, Muzaffarpur, Nawada, Rohtas, Saharsa, Samastipur, Siwan, Supaul, West Champaran
6 Chhattisgarh Bastar, Balod , Balrampur, Bemetra, Bijapur , Durg, Kanker, Kondagaon, Korba, Koriya, Raigarh, Surajpur, Surguja Bastar, Bilaspur, Dantewada, Dhamtari, Jashpur, Kanker, Kawardha, Korba, Mahasamund, Raigarh, Raipur, Rajnandgaon Rajnandgaon Bastar, Dantewada, Kanker, Koriya, Lead: Korba
Cadmium: Korba
Chromium:Korba
7 Delhi New Delhi, North , South, East, West, North West, South West East Delhi, New Delhi, North West Delhi, South Delhi, South West Delhi, North Delhi, West Delhi
East Delhi, Central Delhi, New Delhi, North Delhi, North West Delhi, South Delhi, South West Delhi, West Delhi East, North east Lead : Along Najafgarh drain in North, West and South-west districts
Cadmium : Southwest
Chromium : Northwest, South, New Delhi, East
8 Goa North Goa , South Goa
9 Gujarat Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Jamnagar, Junagadh, Kachchh, Kheda, Mahesana, Navsari, Patan, Porbandar, Rajkot, Sabarkantha, Surat, Surendranagar, Vadodara, Narmada Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Gandhinagar, Jamnagar, Junagadh, Kachchh, Mehesana, Panchmahals, Patan, Porbandar, Rajkot, Sabarkantha, Surendranagar, Vadodara
Ahmedabad, Amreli, Anand, Banaskantha, Bharuch, Bhavnagar, Dahod, Jamnagar, Junagadh, Kachchh, Kheda, Mehesana, Narmada, Navsari, Panchmahals, Patan, Porbandar, Rajkot, Sabarkantha, Surat, Surendranagar, Vadodara Amreli, Anand, Bharuch, Bhavnagar, Dahod, Gandhinagar, Kachchh, Mehesana, Patan, Rajkot, Surendranagar, Vadodara Ahmedabad, Banaskantha, Bhavnagar, Kachchh, Mehesana,Narmada,
10 Haryana Ambala, Bhiwani, Faridabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Mohendragarh, Panipat, Rewari, Rohtak, Sirsa, Sonepat Ambali, Bhiwani, Fatehabad, Faridabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendergarh, Panchkula, Palwal,Panipat, Rewari, Rohtak, Sirsa, Sonepat, Yamuna Nagar
Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendargarh, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonipat, Yamuna Nagar Ambala, Bhiwani, Faridabad, Fatehabad, Hissar, Jhajjar, Jind, Karnal, Panipat, Rohtak, Sirsa, Sonepat, Yamunanagar,
Mahendergarh, Palwal Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendargarh, Panipat, Rohtak, Sirsa, Sonipat, Yamuna Nagar Lead: Ambala, Bhiwani, Faridabad, Fatehabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Mahendragarh, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonepat.
Cadmium: Bhiwani, Gurgaon, Jhajjar, Jind, Kaithal, Rewari, Rohtak.
Chromium: Fatehabad
11 Himachal Pradesh Una, Solan, Hamirpur, Kangra, Mandi, Kullu Kangra
12 Jammu & Kashmir Jammu, Kathua Jammu, Kathua, Anantnag, Kupwara Jammu, Kathua, Rajouri Baramulla, Budgam, Kathua, Kupwara, Pulwama, Srinagar Lead: Jammu (Gangyal), Bari Brahma, Kathua
Cadmium: Kathua
13 Jharkhand Bokaro, Dhanbad, Garhwa,Giridih, Godda, Gumla, Koderma, Pakur Palamu, Ranchi, , Sahebganj, Khunti
Chatra, Garhwa, Godda, Gumla, Lohardaga, Pakur, Palamu, PaschimiSinghbhum, PurbiSinghbhum, Ranchi, Sahibganj Sahebganj Chatra, Deoghar, East Singhbhum, Giridih, Ranchi, West Singhbhum Lead: Jamshedpur

14 Karnataka Bagalkote, Bangalore-Rural, Bangalore-Urban, Belgaum, Bellary, Bijapur, Chamarajnagara, Chikballapur, Chikmagalur, Chitradurga, Dakshina Kannada, Davanagere, Dharwad, Gadag, Gulburga, Hassan, Haveri, Kodagu/ Coorg, Kolar, Koppal, Mandya, Mysore, Raichur, Ramanagara, Shimoga, Tumkur, Udupi, Uttara Kannada, Yadgir Bagalkot, Bangalore(Rural), Bangalore(Urban),Belgaum, Bellary, Bidar, Bijapur, Chikaballapur Chamarajanagar, Chikmagalur, Chitradurga, Davanagere, Dharwad, Dakshina Kannada, Gadag, Gulburga, Hassan, Haveri, Kolar, Koppal, Mandya, Mysore, Raichur, Ramnagara , Shimoga, Tumkur, Yadgir, Uttara Kannada, Udupi
Bagalkot, , Bangalore, Belgaum, Bellary, Bidar, Bijapur, Chikmagalur, Chitradurga, Davanagere, Dharwad, Gadag, Gulburga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mandya, Raichur. Shimoga, Udupi, Uttar Kannada Raichur and Yadgir district Bagalkot, Bangalore, Belgaum, Bellary, Bidar, Bijapur, Chikmagalur, Chitradurga, Dakshina Kannada, Davanagere, Gulburga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mysore, Raichur, Shimoga, Tumkur, Udupi, Uttar Kannada
15 Kerala Trivandrum, Kollam, Kottayam, Ernakulam Palakkad, Alappuzha, Idukki, Ernakulum, Thiruvananthpuram
Alappuzha, Idukki, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Thiruvananthapuram, Thrissur, Wayanad Alappuzha, Ernakulam, Idukki, Kannur, Kasaragod, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Quilon, Thiruvananthapuram, Thrissur, Wayanad Lead: Ernakulam , Kollam
Chromium: Kollam
16 Madhya Pradesh Balaghat, Bhind,Chhatarpur, Gwalior, Indore, Jhabua, Khargone, Morena, Neemuch, Ratlam, Rewa, Satna,Sehore, Sheopur, Shivpuri, Ujjain Alirajpur, Balaghat, Barwani, Betul, Bhind, Bhopal,Chhatarpur, Chhindwara, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Harda, Jabalpur, Jhabua, Khargon, Mandla, Mandsaur, Morena, Narsinhpur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Sagar, Satna, Sehore, Seoni, Shahdol, Shajapur, Sheopur, Sidhi, Shivpuri, Singrauli, Uajjain, Vidisha

Alirajpur, Anuppur, Ashok Nagar, Balaghat, Barwani, Betul, Bhind, Bhopal, Burhanpur, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, , Dindori,Guna, Gwalior, Harda, Hoshangabad, Indore, Jabalpur, Jhabua, Khandwa, Khargon, Katni, Mandla, Mandsaur, Morena, Narsimhapur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Rewa, Sagar, Satna, Sehore, Seoni, Shahdol, Shajapur, Sheopur, Shivpuri, Sidhi, Singrauli, Tikamgarh, Ujjain, Umaria, Vidisha Betual,Burhanpur, Chhindwara, Dhar, Khandwa, Mandsaur, Neemuch, Umaria Balaghat,Barwani, Betul, Bhind, Bhopal, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Hoshangabad, Indore, Jabalpur, Jhabua, Khandwa, Katni, Mandla, Mandsaur, Narsinghpur, Neemuch, Panna, Raisen, Rajgarh,Ratlam, Rewa, Sagar, Satna, Sehore, Seoni, Shahdol, Shajapur,Shivpuri, Sidhi,Tikamgarh, Ujjain, Umaria, Vidisha, East Nimar Lead: Balaghat, Barwani,Damoh, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Raisen, Rajgarh, Satna, Sehore, Shajapur, Shivpuri, Vidisha

17 Maharashtra Ahmednagar, Akola, Amravati, Aurangabad, Beed, Bhandara,Buldhana, Chandrapur,Dhule,Jalgaon, Jalna, Nagpur, Nasik, Pune,Raigard, Sangli,Satara, Solapur, Thane,Yavatmal Ahmednagar, Beed, Chandrapur, Bhandara, Dhule, Gadchiroli, Gondia, Jalna, Nagpur, Nanded, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur, Wardha,Yavatmal
Ahmednagar, Akola, Amravati, Auragabad, Beed, Bhandara, Buldana, Chandrapur, Dhule, Gadchiroli, Gondia, Hingoli, Jalgaon, Jalna, Kolhapur, Latur, Mumbai, Nagpur, Nanded, Nandurbar, Nasik, Osmanabad, Parbhani, Pune, Sangli, Satara, Solapur, Wardha, Washim, Yavatmal Ahmednagar, Amravati, Beed, Buldana, Chandrapur, Dhule, Gadchiroli, Jalna, Kohlapur, Latur, Nandurbar, Nashik, Osmanabad, Parbhani, Ratnagiri, Satara, Thane, Wardha, Washim, Yavatmal Lead: Ahmed Nagar, Akola, Aurangabad, Beed, Buldana, Dhule, Gadchiroli, Jalna, Kolhapur, Latur, Nagpur, Nanded, Osamabad, Parbhani, Pune, Sangli, Wardha, Washim, Yavatmal
18 Manipur Bishnupur, Thoubal Bishnupur, Thoubal
19 Meghalaya East Garo Hills, East Khasi Hills, Jaintia Hills
20 Nagaland Dimapur
21 Odisha Balasore, Bhadrak, Ganjam, Jagatsingpur, Jajpur, Kendrapara, Puri Angul, Balasore, Bhadrak,Bargarh Bolangir, Boudh, Cuttack, Deogarh Dhenkanal, Jajpur, Kandhamal ,Keonjhar, Khurda, Mayurbhanj, Nayagarh, Nawapara, Ganjam, Jagatsinghpur, Kalahandi, Koraput, Puri, Rayagada, Sambalpur, Sonepur, Sundargarh

Angul, Balasore, Bargarh, Bhadrak, Bolangir, Baudh, Cuttack, Deogarh, Dhenkanal, Gajapati, Ganjam, J.Singhpur, Jajpur, Jharsuguda, Kalahandi, Kendrapara, Keonjhar, Khurda, Koraput, Malkangiri, Mayurbhanj, Nawapada, Nayagarh, Phulbani, Puri, Sambalpur, Sundergarh, Sonpur Gajapati Balasore, Bargarh, Bhadrak, Cuttack, Deogarh, J.Singhpur, Jajpur, Jharsuguda, Kalahandi, Kandmahal, Keonjhar, Kendrapara,Khurda, Koraput, Mayurbhanj, Nayagarh, Puri, Rayagada, Sambalpur, Sundergarh, Sonpur Chromium (Hexavalent) - Sukinda valley in Sukinda block of Jajpur District
22 Punjab Bhatinda, Faridkot, Ferozpur, Gurudaspur, Mansa, Moga, Muktsar Patiala, Sangrur Amritsar, Barnala, Bhatinda, Fazilka, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Jalandhar, Ludhiana, Mansa, Moga, Muktsar, Pathankot, Patiala, Ropar, Sangrur, SAS Nagar (Mohali), Tarn-Taran
Amritsar, Barnala, Bhatinda, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Hoshiarpur, Jalandhar, Kapurthala, Ludhiana, Mansa, Moga, Muktsar, NawanShahr, Patiala, Ropar, Rupnagar, Sangrur, Tarn-Taran Mansa, Amritsar, Gurdaspur, Hoshiarpur, Kapurthala, Ropar, Faridkot, Nawashahar, Sangrur, Taran Taran Bhathinda, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Hoshiarpur, Mansa, Rupnagar, Sangrur Lead: Amritsar, Bathinda, Ferozepur, Gurdaspur, Muktsar, Ropar
Cadmium: Fatehgarh Sahib, Ludhiana, Nawansahar, Patiala, Ropar, Sangrur, Sasnagar, Tarantaran
Chromium: Amritsar, Bathinda, Gurdaspur, Kapurthala, Mansa, Ropar, Barnala, Sangrur, Sasnagar, Tarantaran
23 Rajasthan Ajmer, Alwar, Baran, Barmer, Bharatpur, Bhilwara, Bikaner, Bundi, Chittorgarh, Churu, Dausa, Dhaulpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Rajasamand, Sawai-Madhopur, Sikar, Sirohi, Tonk, Udaipur Ajmer, Alwar, Banswara, Barmer, Bharatpur, Baran, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sirohi, Sikar, Sawai Madhopur, Tonk, Udaipur
Ajmer, Alwar, Banswara, Baran, Barmer, Bundi,Bharatpur, Bhilwara, Bikaner, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Partapgarh, Rajasamand, Sirohi, Sikar, SwaiMadhopur, Tonk, Udaipur Ganganagar Ajmer, Alwar, Banswara, Baran, Barmer, Bharatpur, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer,Jalore, Jhalawar, Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sikar, SawaiMadhopur, Sirohi, Tonk, Udaipur
Lead: Jhunjhunu Dist (Khetri Copper Deposit), Pali, Jaipur (Sambhar Lake, Sanganer)
24 Tamil Nadu Chennai, Coimbatore, Cuddalore, Dharampuri, Dindigul, Kancheepuram, Karur, Nagapattinam, Namakkal, Perambalur, Pudukkottai, Ramnathapuram, Salem, Sivaganga, Thanjavur, Theni, Thiruvallur, Tirunelveli, Trichchirappalli, Tuticorin, Vellore, Villupuram, Virudhunagar, Coimbatore, Dharmapuri, Dindigul, Erode, Karur, Kancheepuram, Krishnagiri, Namakkal, Madurai, Puddukotai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai,
Tiruchirapally,
Thirunelveli, Tirupur Vellore, Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kancheepuram, Kanyakumari, Karur, Madurai, Namakkal, Nilgiris, Perambalor, Puddukotai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai, Thanjavur, Tirunelveli, Thiruvallur, Trichy, Tuticorin, Vellore, Villupuram, Virudhunagar Ariyalur
Cuddalore, Nagapattinam,
Ramnathapuram, Tiruvallur, Tirunelveli, Thiruvarur, Trichchirappalli, Tuticorin Namakkal, Salem Lead : Dindigul, Tiruvallur, Kancheepuram
Cadmium : Tiruvallur
Chromium: Cuddalore, Dindigul, Erode, Kanchipuram, Tiruvallur
25 Tripura Dhalai, North Tripura, South Tripura, West Tripura,
26 Uttar Pradesh Agra, Aligarh, Firozabad, Hamirpur, Kashganj,Kanpur Nagar, Mathura, Rae Bareli,Unnao Agra, Aligarh, Allahabad ,Auraiya, Banda ,Bulandshahar ,Etah,Etawah,, Farrukhabad, Fatehpur, , Firozabad, G B Nagar, Ghaziabad, Hathras,Jaunpur, Kannauj , Kanpur Nagar, Kasganj (Kashiram Nagar), Lalitpur, Mahoba, Mainpuri, Mathura, Maunath Bhanjan, Pratapgarh, Rai Bareli, Shajahanpur, Sonbhadra, Sultanpur, Varanasi and Unnao Agra, Aligarh, Allahabad, Ambedkar Nagar, Auraiya, Azamgarh, Badaun, Baghpat, Balrampur, Banda, Barabanki, Bareilly, Basti, Bijnor, Bulandsahr, Chitrakoot, Etah, Fatehpur, Firozabad, GB Nagar, Ghaziabad, Ghazipur, Hamirpur, Hardoi, Hathras, Jaunpur, Jhansi, Kannauj, Kanpur Dehat, Lakhimpur, Mahoba, Mathura, Meerut, Mau, Moradabad, Muzaffarnagar, Mirzapur, Raebarelli, SantRavidas Nagar, Shajahanpur, Sitapur, Sonbhadra, Sultanpur, Shravasti, Siddarth Nagar, Unnao Bahraich, Balia, Balrampur,
Bareilly, Basti, Bijnor, Chandauli, Ghazipur, Gonda, Gorakhpur, LakhimpurKheri, Meerut, Mirzapur, Muradabad, Rai Bareilly, SantKabir Nagar, Shajahanpur, Siddarthnagar, SantRavidasNagar, Unnao, Azamgarh,Bahraich, Badaun, Deoria, Jhansi, Kausambi, Kushinagar, Pilibhit, Maunath Bhanjan,

Azamgarh, Ballia, Balrampur, Etawah, Fatehpur, Gazipur, Gonda, Hardoi, KanpurDehat, Kanpur Nagar, Lakhimpur, Lalitpur, Mau, Siddartnagar, Unnao Lead: Muzzafar Nagar, Mathura, Moradabad, Allahabad, Bhadohi, Ghaziabad, Jaunpur, Kanpur, Raebareli, Sonbhadra
Cadmium: Varanasi city, Unnao

Chromium : Kashi Vidyapeeth, Varanasi, Kanpur, Unnao
27 Uttarakhand Dehradun, Haridwar, Udhamsinghnagar
28 West Bengal Howrah, N 24 Parganas, PurbaMedinipore, S 24 Parganas Bankura, Birbhum, Dakshindinajpur, Malda, Purulia, Uttardinajpur, South 24 Praganas
Bankura, Bardhaman Bardhaman, Hooghly, Howrah, Malda, Murshidabad, Nadia, N-24 Parganas, S- 24 Parganas,
Kochbihar
Bankura, Bardhaman, Birbhum, Dakhindinajpur, E. Midnapur, Howrah, Hugli, Jalpaiguri, Kolkatta, Murshidabad, N-24 Parganas, Nadia, S-24 Parganas, Uttardinajpur, West Midnapur Lead: Malda, Murshidabad, Nadia, N-24 Pargana, S-24 Pragana, Kolkata
Cadmium: N-24 Praganas, S-24 Prganas
Chromium: N-24 Praganas, Murshidabad
29 Andaman& Nicobar Andaman
30 Daman & Diu Diu
Total 212 districts in 15 states 335 districts in 20 states 387 districts in 21 states 153 districts in 21 states & UTs 302 districts in 25 states and 1 UT Pb in 92 districts in 14 states
Cd in 24 districts in9 states
Cr in 29 districts in 10 states